

REMARKS

Claims 1-22 have been examined on their merits.

Applicant thanks the Patent Office for indicating that claims 1-16 are allowed.

The Patent Office objects to claims 19-22 as being dependent upon a rejected base claim.

Applicant thanks the Patent Office for indicating that claims 19-22 would be allowed if rewritten in independent form. However, instead of rewriting claims 19-22 in independent form,

Applicant respectfully traverses the prior art rejections for the reasons set forth below.

Claims 1-22 are all the claims presently pending in the application.

1. Claims 17 and 18 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Watanabe *et al.* (U.S. Patent No. 5,597,223) in view of Choi (U.S. Patent No. 5,181,117).

Applicants traverse the rejection of claims 17 and 18 at least for the reasons discussed below.

The Patent Office has acknowledged that Watanabe *et al.* fails to teach or suggest a contrast control portion that controls the contrast of an optical image signal according to an average level of the image signal. The Patent Office alleges, however, that Choi overcomes the acknowledged deficiencies of Watanabe *et al.*

The combination of Watanabe *et al.* and Choi fails to teach or suggest at least a contrast control portion that controls the contrast of an optical image signal according to an average level of the image signal, as recited in claim 17. As noted by the Patent Office, Choi discloses, *inter alia*, an automatic contrast controller for a video signal (*i.e.*, an image signal). There is no teaching or suggestion in either reference, however, of a contrast control portion that controls the

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contrast of an optical image signal. The contrast controller of Choi receives a video input signal, a vertical drive pulse, composite blanking pulse and clamp pulse signals and outputs a video output signal. *See, e.g.*, Figure 1 of Choi. As is plainly evident from Figure 1 of Choi, the video output signal is not an optical signal, but instead is a modified image signal. Therefore, when Choi is combined with Watanabe *et al.*, the result is a liquid crystal display projection system with a contrast control portion that operates on the image signal, and not the optical signal output by the liquid crystal display panel. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) and *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

Applicant submits that one of skill would not be motivated to combine Watanabe *et al.* with Choi. As discussed above, the contrast control portion of Choi operates on the image signal, and not the optical signal created by the liquid crystal display panel. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) and *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

Based on the foregoing reasons, Applicant submits that the combination of Watanabe *et al.* and Choi fails to teach or suggest all of the claimed elements as arranged in claim 17. Thus, Applicant submits that claim 17 is allowable, and further submits that claim 18 is allowable as well, at least by virtue of its dependency from claim 17. Applicant respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 17 and 18.

2. Claim 18 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Watanabe *et al.* in view of Choi and in further view of Helms (U.S. Patent No. 5,952,992). Applicants traverse the rejection of claim 18 for at least the reasons discussed below.

As discussed above, the Patent Office has not made a proper *prima facie* case of obviousness based on the combination of Watanabe *et al.* and Choi due to their failure to teach or suggest a contrast control portion as recited in claim 17. The addition of Helms does not overcome the fundamental deficiencies of the combination of Watanabe *et al.* and Choi. Helms lacks any teaching or suggestion of a contrast controller, but instead discloses a brightness control circuit that measures the ambient light level to control the brightness of a liquid crystal display. *See, e.g.*, Abstract, Figure 3 and cols. 3 and 4 of Helms. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) and *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

Applicant submits that one of skill would not be motivated to combine Watanabe *et al.* with Choi and Helms. As discussed above, each reference lacks any teach or suggest of a contrast control portion that operates on an optical signal created by a liquid crystal display panel. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) and *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

Based on the foregoing reasons, Applicant submits that the combination of Watanabe *et al.*, Choi and Helms fails to teach or suggest all of the claimed elements as arranged in claim 18.

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Thus, Applicant submits that claim 18 is allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claim 18.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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CUSTOMER NUMBER

Respectfully submitted,



Paul J. Wilson
Registration No. 45,879

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